



Australian Government

TLIC0033 Apply low risk heavy vehicle driving behaviours

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to apply low risk heavy vehicle driving behaviours.

It includes applying relevant legislation applicable to low risk operation of a heavy vehicle, inspecting vehicle and securing load for low risk transportation of goods/cargo, and applying low risk heavy vehicle driving behaviours. It also includes applying low risk heavy vehicle driving strategies, explaining risk factors that contribute to collisions or incidents when driving a heavy vehicle, and applying heavy vehicle operation and control skills.

This includes higher-order skills involving broad cognitive, technical, communication and vehicle management. It also requires knowledge about hazard perception, risk control and low risk driving behaviour, judgement, decision making and multi-tasking that builds on basic driver licence requirements across a nominated heavy vehicle class and driving situations.

This unit applies to heavy vehicle drivers required to apply low risk operating driving behaviours.

Low risk heavy vehicle driving behaviours are applied without supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

C – Vehicle Operation

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Apply relevant legislation applicable to low risk operation of a heavy vehicle

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) regulatory requirements are adhered to prior to driving in order to eliminate or control hazards relating to the driving environment and equipment
- 1.2** Current and relevant road rules and heavy vehicle national law or applicable state/territory law and regulations are identified, interpreted and applied in a low risk manner

2 Inspect vehicle and secure load for low risk transportation of goods/cargo

- 2.1** Pre- and post-operational inspections, checks of vehicle/trailer brake systems, suspension, axles, electrical systems, wheels and tyres, and couplings are undertaken in accordance with national road safety standards, as required
- 2.2** Internal controls and gauges relating to low risk vehicle operation are inspected
- 2.3** Associated equipment is tested to ensure it functions correctly in accordance with manufacturer specifications
- 2.4** Load distribution and security is checked and secured in accordance with current load restraint guidelines and protection equipment
- 2.5** Load is checked to ensure dangerous goods (DG) and hazardous substances are appropriately segregated in accordance with the current Australian Dangerous Goods (ADG) Code
- 2.6** All required goods documentation is completed in accordance with workplace requirements and the current ADG Code, as required

3 Apply low risk driving behaviours in a heavy vehicle

- 3.1** Requirements for low risk heavy vehicle driving are applied
- 3.2** Importance of attitude in complying with road rules in relation to level of risk faced by a driver is applied when driving a heavy vehicle
- 3.3** Importance of road sharing principles is applied when driving a heavy vehicle, including interacting

- with other road users, in accordance with road rules to ensure safe and efficient traffic flow
- 3.4** Importance of motivation to drive in a low risk manner is interpreted and explained
 - 3.5** Principles of low risk driving methods are identified and applied
 - 3.6** Contributing risk factors to potential collision risks are identified and taken into consideration
- 4 Apply low risk heavy vehicle driving strategies**
- 4.1** Contributing risk factors to forming opinions and beliefs about low risk driving are applied
 - 4.2** Human factors that can influence low risk driving behaviour are outlined
 - 4.3** Low risk driving strategies are applied and their intent explained
- 5 Explain risk factors that contribute to collisions or incidents when driving a heavy vehicle**
- 5.1** Contributing risk factors to collisions or incidents are recognised
 - 5.2** External and internal factors that could lead to collisions or incidents are outlined
 - 5.3** Consequences of collisions or incidents in relation to relevant traffic laws and physical, financial and psychological costs to the individual and society are explained
 - 5.4** Functions of vehicle operations and control and how to recover control of a vehicle are explained
- 6 Apply heavy vehicle operation and control skills**
- 6.1** Appropriate actions are taken to identify and negotiate hazards in a low risk manner on various road surfaces
 - 6.2** Principles of heavy vehicle control are applied to a high level of technical competence
 - 6.3** Principles of low risk heavy vehicle driving techniques and frameworks are carried out to a high level of technical competence

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of

competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the TLI Transport and Logistics Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIC3037 Apply safe heavy vehicle driving behaviours.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIC0033 Apply low risk heavy vehicle driving behaviours

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and include:

- adapting to differences in heavy vehicles, including their operations, controls and safety devices to maximise safety and efficiency
- applying advanced observation and scanning techniques, including:
 - hazard awareness identification at short, mid and long ranges
 - removal of blind spot, natural eye blind spot and vision block out
 - selecting a legal and low risk lateral position in unlaned, multi-laned lanes, rural and urban roads
 - straight line driving, short, mid and long-range scanning techniques
- applying attention allocation techniques to maximise hazard awareness and negotiation
- applying correct selection and application of a braking and gear system
- applying correct steering techniques to maximise stability and safety on rural and urban roads when turning or negotiating bends
- applying early position planning techniques that reduces braking distance on approach to hazards
- applying emergency high-speed threshold braking techniques to minimise braking distance while maintaining vehicle safety and control
- applying high-level road craft skills to maximise road surface traction, vehicle stability in a low risk manner
- applying road rules when driving in a low risk and legal manner
- applying techniques on hazard approach and negotiation including:
 - hazard approach in a low risk manner
 - hazard identification, systems approach
 - hazard negotiation in a low risk manner
- applying thinking frameworks to systemise driving skills on approach to hazards
- applying work health and safety (WHS)/occupational health and safety (OHS) workplace procedures, requirements and practices
- approaching and negotiating low risk high-speed bends with different cambers
- carrying out pre- and post-operational checks and related action on heavy vehicles including checking appropriate signage, lights and equipment for operational effectiveness and for conformity to prescribed traffic regulations

- changing gears on any incline and decline, maximizing vehicle control, safety, driveline protection and operational efficiency on rural and urban roads
- complying with relevant legislative, regulatory and workplace procedures when driving a heavy vehicle
- creating, adjusting and controlling 360-degree safety cushion to lower risk at all times
- diverging and merging left and right, in a low risk and legal manner, while maintaining maximum vehicle stability
- entering, exiting and traveling along a freeway in a low risk and legal manner
- evaluating risk, consequences and personal responsibility of own driving actions
- following operational instructions
- identifying, monitoring and anticipating traffic hazards and taking appropriate and timely action
- identifying risk factors that might impact on driving behaviours and implementing appropriate low risk driving response measures
- internalising techniques to reduce risk to self and others
- making necessary adjustments to suit driving environment
- manoeuvring a heavy vehicle at slow speed
- monitoring and anticipating traffic hazards and taking appropriate and timely action
- monitoring heavy vehicle performance and taking appropriate actions, as required
- moving the vehicle from a stationary position on any incline and decline in an efficient, safe and legal manner while protecting the drive train
- negotiating left and right corners in a low risk and legal manner including:
 - high-speed bends with different cambers
 - laned
 - multi-turning lanes
 - unlaned
- negotiating roundabouts, straight, left, right and U-turns in a low risk and legal manner including:
 - laned
 - multi-turning lanes
 - unlaned
- reading and interpreting relevant instructions, road rules, procedures, jurisdictional requirements, information and signs when driving
- reversing the vehicle in various directions while applying correct observation techniques and vehicle control in a low risk and legal manner
- selecting an appropriate speed and safety gap to lower risk when driving in adverse weather, hazard density and road conditions
- selecting and using vehicle controls and safety devices to enable low risk heavy vehicle driving
- selecting speed based on hazard density and legal requirements
- stopping the vehicle from variable speeds at a defined location in a safe, controlled and legal manner.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and include knowledge of:

- additional equipment fitted to heavy vehicles
- application and understanding of advanced observation techniques
- cabin drill theory on vehicle operation and control including:
 - correct operation of controls
 - gear selection up and down, automatic or manual vehicles
 - identifying key information for information systems
 - application of in-vehicle technology
 - managing vehicle control pedals for efficiency, safety and feel
 - steering methods, hand over hand and pull push advantages and disadvantages
- cognitive factors that may influence performance in heavy vehicle driving
- consequences of heavy vehicle collisions or incidents
- critical factors underpinning high-level heavy vehicle driving technical competence
- dangerous goods systems and dangerous goods regulation requirements
- driving hazards and related low risk driving techniques
- efficient gear changes on any incline and decline, manual and automatic heavy vehicles, while protecting the drive train
- efficient heavy vehicle movement from a stationary position, manual and automatic, while protecting the drive train
- emergency threshold braking techniques to maximise stability and control
- factors contributing to collisions or incidents including:
 - age, experience, drugs, alcohol, medication, road conditions, fatigue and time of day
 - consequences of vehicle collisions or incidents
 - emotional factors, driver's own behaviours and driver's operation at high levels of risk
 - types of adverse driving conditions commonly encountered during driving activities, driver values, emotions, limitations and personal needs
- heavy vehicle braking systems and techniques for use, such as maxi brakes, trailer brakes and exhaust brake system
- left and right turn requirements on laned and unlaned roads
- load restraint guidelines
- low risk driving behaviours including:
 - application of advanced observation and scanning techniques including:
 - procedures for identifying and responding to hazards
 - removal of blind spot, natural blind spot and vision block out
 - application of key techniques that reduce braking distance on approach to hazards
 - creating and maintaining collision and incident avoidance space technique
 - early position selection on approach to hazards and risk reduction theories
 - hazard approach and negotiation

- protecting collision and incident avoidance space
- speed selection based on hazard density and legal requirements
- position on road or lanes requirements for both laned and unlaned roads
- procedures for identifying and responding to hazards
- purpose and benefits of road rules enforcement for low risk heavy vehicle driving
- range of heavy vehicle and trailer designs and capabilities
- relevant laws and penalties for demerit point offences, such as driving while unlicensed, disqualified or under the influence of drugs or alcohol
- relevant road rules and traffic safety legislation including:
 - alcohol and drugs
 - driver licensing
 - rationale for ongoing development of traffic safety regulations to meet changing traffic conditions
 - vehicle registration
- road rules, safety information and directions
- road safety issues including heavy vehicle driver fatigue
- road signs, signals and markings meanings
- roundabouts including straight, left, right and U-turns on laned and unlaned roads
- rural and urban roadcraft including:
 - cornering and turning techniques including different cambers
 - different types of skids and recovery techniques
 - interpreting, adjusting and negotiating different road surfaces
 - multi-lane entry and exit
 - overtaking and passing other vehicles
 - road and lane position
 - speed scatter
- speed and the effect on vehicle handling, braking and cornering
- speed effect on vision, hazard awareness and mental processing
- starting and stopping the vehicle in a safe and efficient manner
- steering operation and control
- techniques, stability, legality and low risk requirements for diverging and merging
- telematics systems
- types of driving conditions commonly encountered requiring correct selection of appropriate gears to avoid losing control of a heavy vehicle
- types of driving conditions commonly encountered requiring steering operation/control to maintain a heavy vehicle under adverse conditions
- vehicle operation and control including:
 - cabin drill
 - in-vehicle technology
 - managing accelerator
 - managing brakes

- managing steering
- start, move off, shut down and secure.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations in a heavy vehicle typical of that used in industry and on a variety of road conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation, including legislation, regulations, codes of practice, workplace procedures and operation manuals
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- suitable vehicle that meets state/territory requirements.

Links

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